

CLAIM AMENDMENTS

Claims 1 through 90 (canceled)

1           Claim 91 (Previously presented)   An isolated  
2 polynucleotide coding for a polypeptide comprising the amino acid  
3 sequence of SEQ ID NO:2.

1           Claim 92 (Previously presented)   A vector comprising the  
2 isolated polynucleotide of claim 91.

1           Claim 93 (Previously presented)   A bacterium of the genus  
2 Corynebacterium comprising the isolated polynucleotide of claim 91.

1           Claim 94 (Previously presented)   The bacterium of claim  
2 93, wherein said bacterium is one of the species Corynebacterium  
3 glutamicum.

1           Claim 95 (Previously presented)   A bacterium of the  
2 species Escherichia coli or Corynebacterium glutamicum comprising  
3 the vector of claim 92.

1           Claim 96 (Previously presented)   An isolated  
2 polynucleotide comprising the nucleotide sequence of nucleotides  
3 165 to 3587 of SEQ ID NO:1.

1           Claim 97 (Previously presented) A vector comprising the  
2 isolated polynucleotide of claim 96.

1           Claim 98 (Previously presented) A bacterium of the genus  
2 Corynebacterium comprising the isolated polynucleotide of claim 96.

1           Claim 99 (Previously presented) The bacterium of claim  
2 98, wherein said bacterium is one of the species Corynebacterium  
3 glutamicum.

1           Claim 100 (Previously presented) A bacterium of the  
2 species Escherichia coli or Corynebacterium glutamicum comprising  
3 the vector of claim 97.

1           Claim 101 (Previously presented) An isolated  
2 polynucleotide comprising the nucleotide sequence of SEQ ID NO:1.

1           Claim 102 (Previously presented) A vector comprising the  
2 isolated polynucleotide of claim 101.

1           Claim 103 (Previously presented) A bacterium of the  
2 genus Corynebacterium comprising the isolated polynucleotide of  
3 claim 101.

1           Claim 104 (Previously presented) The bacterium of claim  
2   103, wherein said bacterium is one of the species *Corynebacterium*  
3   *glutamicum*.

1           Claim 105 (Previously presented) A bacterium of the  
2   species *Escherichia coli* or *Corynebacterium glutamicum* comprising  
3   the vector of claim 102.

1           Claim 106 (Previously presented) An isolated polypeptide  
2   having pyruvate carboxylase enzymatic activity comprising the amino  
3   acid sequence of SEQ ID NO:2.

1           Claim 107 (Currently amended) A pVWEX1pyc vector  
2   contained in the bacterium deposited under DSM 12893.

1           Claim 108 (Previously presented) A bacterium comprising  
2   the vector of claim 107.

1           Claim 109 (Currently amended) An isolated pyruvate  
2   carboxylase polypeptide having an amino acid sequence ~~at least 95%~~  
3   substantially identical to the amino acid sequence of the pyruvate  
4   carboxylase polypeptide having the complete amino acid sequence in  
5   SEQ ID NO:2.

1           Claim 110 (New) A method of microbial production of  
2   amino acids of aspartate and glutamate family strains in a culture

3 medium, by microorganisms, whereby said microorganisms are  
4 transformed by an isolated polynucleotide encoding pyruvate  
5 carboxylase comprising a sequence selected from the group  
6 consisting of:

7 a) a polynucleotide encoding a pyruvate carboxylase  
8 polypeptide comprising the amino acid sequence of SEQ ID NO: 2; and

9 b) a polynucleotide encoding the pyruvate carboxylase  
10 polypeptide having the amino acid sequence encoded by the clone  
11 contained in the bacterium deposited under DSM 12893,  
12 wherein said. pyruvate carboxylase is expressed with increased copy  
13 numbers compared to the starting microorganism and producing said  
14 amino acids.

1 Claim 111 (New) The method according to claim 110,  
2 wherein the amino acid is selected from the group consisting of  
3 L-lysine, L-threonine, L-homoserine, L-glutamate and L-arginine.

1 Claim 112 (New) The method according to claim 110,  
2 wherein the microorganism strains are selected from the group  
3 consisting of *Corynebacterium*, *Escherichia coli*, and *Serratia*  
4 *marcescens*.

1 Claim 113 (New) The method according to claim 110,  
2 wherein increasing the copy number is achieved by transforming said  
3 microorganisms with a vector comprising the isolated polynucleotide

4 encoding a polypeptide comprising the amino acid sequence of SEQ ID  
5 NO: 2.

1 Claim 114 (New) The method according to claim 113,  
2 wherein said isolated polynucleotide comprises the nucleotide  
3 sequence of nucleotides 165 to 3587 of SEQ ID NO:1.

1 Claim 115 (New) The method according to claim 113,  
2 wherein said isolated polynucleotide comprises the nucleotide  
3 sequence of SEQ ID NO:1.

1 Claim 116 (New) A method of microbial production of  
2 L-lysine in a culture medium, by a strain of *Corynebacterium*  
3 *glutamicum*, whereby said strain is transformed by an isolated  
4 polynucleotide encoding pyruvate carboxylase comprising a sequence  
5 selected from the group consisting of

6 a) a polynucleotide encoding a pyruvate carboxylase  
7 polypeptide comprising the amino acid sequence of SEQ ID ND: 2; and

8 b) a polynucleotide encoding the pyruvate carboxylase  
9 polypeptide having the amino acid sequence encoded by the clone  
10 contained in the bacterium deposited under DSM 12893,  
11 wherein said pyruvate carboxylase is expressed with increased copy  
12 numbers compared to the starting strain, and producing said  
13 L-lysine.

1           Claim 117 (New) The method according to claim 116,  
2 wherein said isolated polynucleotide comprises the nucleotide  
3 sequence of nucleotides 165 to 3587 of SEQ ID NO:1.

1           Claim 118 (New) The method according to claim 116,  
2 wherein said isolated polynucleotide comprises the nucleotide  
3 sequence of SEQ ID NO:1.